

## What Money Can't Buy: The Psychology of Financial Overcompensation

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## ABSTRACT

When a financial damage has been inflicted, perpetrators can satisfy victims' outcome related concerns by providing a financial compensation. Few studies have investigated, however, whether *overcompensation* (i.e., compensation that is greater than the damage suffered) is more beneficial than *equal compensation* (i.e., compensation that covers the exact damage suffered). The results of four studies show that overcompensation offers no effects in addition to the impact of equal compensation, and that it even provokes negative outcomes. More specifically, overcompensation is attributed to occur because of a lower level of moral orientation on the part of the perpetrator (Study 2 through 4), leads to less favorable perceptions of the perpetrator (Study 2 and 4), and lower levels of trust in the perpetrator (Study 3 and 4) than equal compensation. No significant differences between overcompensation and equal compensation appeared for relationship preservation and cooperation (Study 4). These results show that while overcompensation may rebuild cooperation (albeit not more effectively than equal compensation), it does so at a monetary and relational cost that limits its effectiveness as a tool to promote true interpersonal trust. The present studies thus show that a large financial compensation does not provide any surplus value in terms of psychological outcomes and relationship continuation, even though such compensation best satisfies a victim's economic needs.

**Keywords:** financial overcompensation; fairness; equality; trust; cooperation

**JEL Classification:** D23 - Organizational Behavior; D63 - Equity, Justice, Inequality, and Other Normative Criteria and Measurement

**PsycINFO Classification:** 3000 - Social Psychology; 3020 - Group & Interpersonal Processes

## 1. INTRODUCTION

After a financial damage has been inflicted, like in case of a damaged property or an unequal division of resources, victims' outcome-related concerns are violated (Bolton & Ockenfels, 2000; Fehr & Schmidt, 1999). Previous studies have shown that a violation of these concerns is often perceived as unfair, and consequently may lead to a host of negative reactions, such as anger and spite (Pillutla & Murnighan, 1996), reduced interpersonal trust (Desmet, De Cremer, & Van Dijk, 2011), lower intentions to preserve the relationship (Haesevoets, Reinders Folmer, De Cremer, & Van Hiel, 2013), and decreased cooperation (Bottom, Daniels, Gibson, & Murnighan, 2002).

One way to settle for the outcome-related violations is to provide a financial compensation, a monetary reimbursement to be paid by the perpetrator as a compensation for the victim's financial loss. Sometimes an *overcompensation* is offered. In these cases, victims receive a compensation that is greater than the damage they suffered, which results in a more favorable outcome for the victim than the perpetrator, and thus signals self-sacrifice from this perpetrator (see De Cremer & Van Knippenberg, 2002, 2004). Such overcompensation occurs in real-life, for example in the context of customer service complaints when companies provide additional compensation that goes beyond mere failure restoration (e.g., in the form of a refund, a coupon, or a product replacement that is worth more than the damage suffered), in order to increase post-complaint satisfaction (Boshoff, 1997; Estelami, 2000; Estelami & De Maeyer, 2002; Gilly & Hansen, 1985). Or, in case of hotel overbooking, when a customer is offered the finest suite of the hotel, a voucher, or a cash-based overcompensation (Noone & Lee, 2011).

Although overcompensation occurs in many real-life situations (as illustrated by the above mentioned examples), it is unclear whether overcompensation entails higher satisfaction with the arrangement than *equal compensation* (i.e., compensation that covers the exact damage suffered). Indeed, very few empirical studies have investigated whether overcompensation has positive consequences beyond equal compensation. Because overcompensation is associated with

additional costs on top of the expenses of equal compensation, it is costly for the perpetrator, but at the same time profitable for the victim. Moreover, since people attach high value to fairness and equality (see Camerer, 2003; Messick, 1993) – and overcompensation fails to restore equality in outcomes – the critical question that arises is whether such costly overcompensation has beneficial effects, and more specifically, has effects in addition to the impact of equal compensation? To answer this question, we contrast an economic perspective (which focuses on the magnitude of the outcomes per se) and a psychological perspective (focusing on fairness and equality in outcomes, rather than the outcome itself) on overcompensation.

### **1.1 An economic perspective on overcompensation**

According to classic economic theory, which is based upon the concept of “homo economicus” or “economic man”, individuals are mainly motivated by money and by the possibility of making profits (Franz, 2004). Hence, such an economic perspective assumes that individuals are self-interested and, above all else, want to maximize their own outcomes (Camerer & Thaler, 1995; Dawes & Thaler, 1988). This implies that, in terms of economic outcomes, after a financial harm has been inflicted, greater compensation should yield better outcomes for the victim. In line with this argument, there is some evidence in consumer behavior that indicates that, after a service failure, overcompensation results in more satisfaction than an equal compensation (Boshoff, 1997; Gilly & Hansen, 1985).

Hence, from an economic perspective, when an overcompensation is granted the recipient can be expected to show a host of positive reactions. More specifically, compared to equal compensation, overcompensation should foster greater satisfaction with the agreement, more favorable perceptions of the perpetrator, higher levels of trust in this perpetrator, and a greater willingness to continue the relationship with this perpetrator (e.g., see Desmet et al., 2011; Lewicki, Wiethoff, & Tomlinson, 2005; also see De Cremer & Van Kleef, 2009; De Cremer & Van Knippenberg, 2002, 2004).

## **1.2 A psychological perspective on overcompensation**

Psychological models have postulated that behavior in interpersonal settings is not only driven by concerns for tangible outcomes, but also by other, non-material concerns (see Curhan, Elfenbein, & Xu, 2006). Specifically, rather than the magnitude of outcomes per se, it is also important whether these outcomes are fair and in proportion to the damages suffered. Indeed, a substantial body of research has shown that people are influenced profoundly by such fairness considerations (for reviews on this matter, see Bazerman, White, & Loewenstein, 1995; Folger, 1984; Törnblom, 1992), and that in many situations people adhere to the fairness norm of equality as a decision heuristic (Messick, 1993). The equality norm (Deutsch, 1975) assumes that people prefer equal outcomes between all members of some specified group (see Camerer & Thaler, 1995; Handgraaf, Van Dijk, & De Cremer, 2003; Lerner, 1975; Pillutla & Murnighan, 2003; Sampson, 1975; Van Dijk, De Cremer, & Handgraaf, 2004). Based on this norm different effects of overcompensation, relative to equal compensation, might be expected.

From one point of view, as soon as the financial compensation undoes the damage suffered by meeting or exceeding the equality norm, a ceiling effect might occur whereby people benefit little from additional financial restitution (see Haesevoets et al., 2013). This implies that overcompensation should yield similar (no better, nor worse) results as equal compensation. Accordingly, research in the area of consumer behavior recently confirmed the idea that overcompensation is of little additional value in a meta-analysis of 17 experimental studies (Gelbrich & Roschk, 2011) by showing that overcompensation does not significantly enhance post-complaint satisfaction beyond the effect of simple compensation (i.e., when the refund given is equivalent to or less than the purchase price).

From another point of view, however, equal compensation and overcompensation differ in the extent to which the compensation reestablishes equality in outcomes between the victim and the perpetrator (Messick, 1993). That is, while equal compensation restores equality,

overcompensation fails to restore equality, as it turns the state of disadvantageous inequality on the part of the victim into a state of advantageous inequality. Because of the high value that people attach to equality (Deutsch, 1975; Lerner, 1975; Sampson, 1975), equal compensation should be considered the best possible outcome for a victim. Research on fairness has indeed revealed that people's appreciation of equal and unequal outcomes may not match their objective monetary value (e.g., see Adams & Freedman, 1976). More specifically, although people prefer advantageous inequity over disadvantageous inequity, most people prefer equal outcomes over both advantageous and disadvantageous inequity (Loewenstein, Thompson, & Bazerman, 1989). In other words, people value equality over other outcome distributions, even if those might objectively have greater economic value and thus prove more favorable to the self. Following this point of view, overcompensation should even be less effective than equal compensation. Moreover, after receiving overcompensation, people may feel guilty because they consider the compensation to be exaggerated, or be suspicious about the motives of the perpetrator (see Estelami & De Maeyer, 2002).

Taken together, if people's behavior is not only driven by concerns for the outcome in itself, but also by fairness considerations, overcompensation should not be more effective (i.e., as effective or even less effective) than equal compensation in entailing positive outcomes regarding for example satisfaction, perceptions, trust, and cooperation.

### **1.3 Previous Research**

In spite of its ubiquity in social life and the different theoretical perspectives on its potential effectiveness very few studies investigated the effectiveness of overcompensation with regard to important variables such as equality, trust betrayal, trust repair, and cooperation (for some exceptions, see Bies & Tripp, 2006; Joskowicz-Jablonek & Leiser, 2013; Schweitzer, Hershey, & Bradlow, 2006; Stouten, De Cremer, & Van Dijk, 2006). Moreover, the few studies conducted so far focused on very small overcompensations and revealed inconsistent results.

Specifically, relative to equal compensation, some studies reported positive effects of slight overcompensation, while other studies reported neutral or even negative effects (see Desmet et al., 2010, 2011; Haesevoets et al., 2013).

We believe that these inconsistent results are possible due to the fact that these studies focused on different aspects of trust, namely affect-based trust (e.g., interpersonal trust, see the studies of Desmet et al., 2010, 2011) versus cognition-based trust (e.g., relationship preservation, see the studies of Haesevoets et al., 2013). Affect-based trust, on the one hand, depends on the emotional bonds between individuals, which entails caring about others' needs (Lewis & Wiegert, 1985). Here, the main focus is on the relationship itself. Cognition-based trust, on the other hand, reflects a strategic choice based on the prospect of making a profit (Lewicki & Bunker, 1996). Here the main focus is not on the relationship itself, but on the benefits that the relationship may provide. Thus, based on these different foundations that underlie trust, it is possible that overcompensation reveals different patterns of results for more affective, relational-based outcomes (such as interpersonal trust, cf. affect-based trust) than for more cognitive, calculus-based outcomes (such as relationship preservation and further cooperation, cf. cognition-based trust; see McAllister, 1995; also see Lewicki & Bunker, 1996; Lewicki et al., 2005; Rousseau, Sitkin, Burt, & Camerer, 1998; Williams, 2001).

#### **1.4 Present Studies**

Because we were particularly interested in the conflict between economic and psychological motives, in the present research we focus on the effectiveness of a large overcompensation between two strangers in a newly formed relationship. In such situations there is no interference of past behavior on future trust and cooperation. From an economic perspective, large overcompensation results in high profit for the victim, but at the same time it constitutes a serious deviation from equality according to a psychological perspective. Consequently, in the present paper we aim to answer the following research question: *After a*

*financial damage has been inflicted, is overcompensation more effective, as effective, or even less effective than equal compensation to yield positive outcomes (like great satisfaction, favorable perceptions, and high levels of trust and cooperation)?* To answer this question, we conducted a questionnaire study (Study 1), two scenario studies (Study 2 and 3), and a lab experiment (Study 4) in which a financial harm was inflicted in the first phase of each study (i.e., a damaged property in Study 1 through 3 and an unequal division of resources in Study 4), that he or she then tried to undo by offering the victim an equal compensation or an overcompensation.

## 2. STUDY 1: QUESTIONNAIRE STUDY

### 2.1 Methods

#### 2.1.1 Participants, design, and procedure

The aim of this first study was to gain insight in the attributions that people ascribe to financial compensation, in order to develop a measurement for our further studies. Therefore, as part of a classroom exercise, 44 undergraduate political sciences students at Ghent University (26 men, 13 women, and five individuals who did not specify their gender,  $M_{age} = 21.11$ ,  $SD = 3.93$ ) participated voluntarily in a questionnaire study, in which they were randomly assigned to a two condition (compensation: equal compensation versus overcompensation) between-subjects design. A short scenario presented an anonymous person (the perpetrator) who caused a purely financial damage of €50 to another anonymous person (the victim). In the *equal compensation* condition, participants were told that the perpetrator reimbursed this financial loss by paying the victim €50. In the *overcompensation* condition, the perpetrator paid the victim €500. No further information regarding the relationship between the perpetrator and the victim or the nature of the transgression was provided.

#### 2.1.2 Measures



To get a broad picture of the attributions people believe to underlie financial compensation, we asked participants an open question: “Why do you think this person paid €50 (if the damage equals €50)?” in the *equal compensation* condition, and “Why do you think this person paid €500 (while the damage equals only €50)?” in the *overcompensation* condition.

## 2.2 Results

Participants’ answers to the open question revealed 30 different attributions. Fourteen unique attributions were obtained in the equal compensation condition, ten attributions emerged solely in the overcompensation condition, while six attributions occurred in both the equal compensation and overcompensation conditions. Out of these 30 attributions, 15 attributions were mentioned by at least three participants. These 15 attributions (that are given in the first column of Table 1) were used to develop a measurement of attributions that people believe to underlie financial compensation. This measure was used in our further studies.

## 3. STUDY 2: SCENARIO STUDY

### 3.1 Methods

#### 3.1.1 Participants, design, and procedure

As part of a classroom exercise, 90 undergraduate social sciences students at Ghent University (22 men, 65 women, and three individuals who did not specify their gender,  $M_{age} = 19.61$ ,  $SD = 2.82$ ) participated voluntarily in a scenario study. Participants were again randomly assigned to a two condition (compensation: equal compensation versus overcompensation) between-subjects design. We used the same scenario as in the previous study, in which a person first caused a financial damage and then made up for this loss by offering the victim an equal compensation or an overcompensation.

#### 3.1.2 Measures

*Attributions underlying a compensation.* First, to measure the extent to which participants believed a particular attribution to underlie financial compensation, we used the 15 attributions that had been mentioned by at least three participants in the previous study. For each of these attributions we asked participants: “To what extent do you think this person paid €50 [attribution]?” in the *equal compensation* condition, and “To what extent do you think this person paid €500 [attribution]?” in the *overcompensation* condition (1 = *not at all*, 7 = *very much*).

*Perceptions of person who offers a compensation.* Besides these attributions, in the present study we also probed participants’ perceptions of the person who offered the compensation. Therefore, we employed seven items that are based on the benign impressions scale (see Tazelaar, Van Lange, & Ouwerkerk, 2004; Van Lange, Ouwerkerk, & Tazelaar, 2002). In both conditions, we asked participants, “To what extent do you think this person is: honest, just, trustworthy, friendly, reliable, insincere, and unlikable (1 = *not at all*, 7 = *very much*; negative items reverse-coded). These items were aggregated into a scale measure of perceptions of the person who offered the compensation ( $M = 4.54$ ,  $SD = 0.96$ ,  $\alpha = .86$ ).

## 3.2 Results

### 3.2.1 Factor congruence

Given that the attributions we obtained in Study 1 often pertained to only the equal compensation or overcompensation condition, we checked whether the underlying structure of these attributions was similar in both conditions. Therefore, we first extracted principal components (with eigenvalues  $> 1$ ) from the correlations among the attributions in each condition separately. Next, we calculated the degree of congruence between the two sets of component loadings (see Harman, 1976).

In the equal compensation condition ( $n = 43$ ), four components were extracted with an eigenvalue of 4.99, 2.23, 1.78, and 1.20, respectively. In the overcompensation condition ( $n = 47$ ), we extracted five components with an eigenvalue of 4.28, 2.17, 1.55, 1.22, and 1.10,

respectively. Following Harman's (1976) empirical rule, we then computed the correlations among the component scores that were obtained in both conditions. It was revealed that the four components of the equal compensation condition were well represented in the other condition, with correlations among components ranging from .75 to .93 (all  $ps \leq .001$ ). Only the fourth component in the overcompensation condition was not related to any of the components in the equal compensation condition. This result thus indicates that the four extracted components in the equal compensation condition are congruent with the factors found in the overcompensation condition.

Because we obtained support for the factor congruence across both compensation conditions, we extracted four principal components from the scores on these 15 attributions, using the total sample ( $N = 90$ ). These components had an eigenvalue of 4.46, 2.54, 1.65, and 1.20, respectively. Table 1 shows the factor loadings of these four component scores after OBLIMIN rotation. As can be inferred from these loadings, the attributions 'enlighten one's conscience', 'guilt', 'feeling better about oneself', and 'financial capability' (attribution 1 through 4) loaded on the first component, which we labeled *proself orientation* ( $\alpha = .80$ ). The attributions 'righteousness', 'logical', 'reciprocity', 'moral obligation', and 'taught in education' (attribution 5 through 9) constituted the second component, which we labeled *moral orientation* ( $\alpha = .86$ ). The attributions 'surprised', 'compensate for additional costs', 'no accurate estimation of the damage', and 'fear' (attribution 10 through 13) loaded on the third component, which we labeled *uncertainty reduction orientation* ( $\alpha = .67$ ). Finally, the attributions 'quickly get out of the situation' and 'silence the victim' (attribution 14 and 15) constituted the fourth component, which we labeled *exit orientation* ( $\alpha = .52$ ). The correlations among these four components were rather modest (all  $rs < .31$ ).

[Insert Table 1 about here]

### 3.2.2 Attributions underlying a compensation

We conducted four independent t-tests to compare the scores on these four components between conditions. Therefore, we used the four component scores that were extracted by the principal component analysis (using the total sample). There was only a significant difference between equal compensation ( $M = -0.65$ ,  $SD = 0.90$ ) and overcompensation ( $M = 0.59$ ,  $SD = 0.67$ ) for *moral orientation*,  $t(86) = -7.39$ ,  $p < .001$ . No significant differences between equal compensation and overcompensation were obtained for *proself orientation*, *uncertainty reduction orientation*, and *exit orientation* (all  $ps > .05$ ). These results thus suggest that a person who offered an overcompensation is considered to be less morally oriented than a person who offered an equal compensation.

### 3.2.3 Perceptions of person who offers a compensation

We also obtained a significant difference in perceptions of the person offering the compensation,  $t(87) = 2.50$ ,  $p < .05$ . A person who offered an equal compensation ( $M = 4.80$ ,  $SD = 0.86$ ) is perceived more favorably than a person who offered an overcompensation ( $M = 4.31$ ,  $SD = 1.00$ ).

## 3.3 Discussion

This study provides initial evidence that when a financial harm has been inflicted, and the perpetrator subsequently offered an overcompensation, this person is perceived less favorably and the attributions underlying his or her behavior are considered to be due to a lower level of moral orientation than when this person offered an equal compensation. This result was obtained with a major overcompensation (i.e., compensation that covered ten times the damage suffered), which from an economic perspective represents the best situation for a victim because of the high profits, while from a psychological perspective it constitutes a serious deviation from equality. In these situations, in which the conflict between self-interest and concerns for equality is at a high level, people seem most concerned about fairness as they prefer a perpetrator who provides an equal compensation compared to a perpetrator who offers an overcompensation.

#### 4. STUDY 3: SCENARIO STUDY

In the previous study we focused on attributions underlying the compensation and perceptions of the perpetrator. Because trust has been reported to be an important outcome variable in previous research on the effectiveness of financial compensation (i.e., trust restoration, see Lewicki et al., 2005; Ren & Gray, 2009; also see Desmet et al., 2010, 2011), in the present study we also examined the effectiveness of equal compensation and overcompensation on trusting intentions.

Moreover, in the present study we focused on a situation in which the participant was the victim of the financial harm and the recipient of the compensation. The previous two studies focused on a situation in which participants evaluated a financial compensation between a dyad (i.e., a victim and a perpetrator) as an observer. By making participants themselves the victim of the transgression, this study will enable us to examine whether participants' judgments of overcompensation also extend to situations where they themselves are the recipient of this compensation (e.g., see Risen & Gilovich, 2007).

##### 4.1 Methods

###### 4.1.1 Participants, design, and procedure

As part of a classroom exercise, 55 undergraduate social sciences students at Ghent University (12 men, 38 women, and five individuals who did not specify their gender,  $M_{age} = 19.17$ ,  $SD = 1.51$ ) participated voluntarily in a scenario study. They were randomly assigned to a two condition (compensation: equal compensation versus overcompensation) between-subjects design. A short scenario was presented in which a classmate (unknown to the participant) damaged the participant's newly purchased textbook during a lecture (by spilling a can of Coke on it). It was explained that his book had a monetary value of €10 (and no emotional or practical value). In the *equal compensation* condition, the perpetrator reimbursed the participant's financial

loss by repaying the exact value of the textbook (i.e., €10). In the *overcompensation* condition, the perpetrator paid the participant €100.

#### 4.1.2 Measures

*Attributions of moral orientation.* We measured the five attributions that constituted the moral orientation component in Study 2. Specifically, we asked participants, “I think that this person paid me €10 (*equal compensation* condition) / €100 (*overcompensation* condition): because this is righteous, because this is the most logical response, because he or she embraces the principle of reciprocity, out of moral obligation, and because this is what people are taught to do” (binary choice: 0 = *no*, 1 = *yes*).

*Trusting intentions.* Participants’ trusting intentions towards the perpetrator were measured using six trust items (Desmet et al., 2011): “I trust this person”, “I have no trust in this person”, “I think this person would deceive me if he or she would benefit from it”, “I think this person can be trusted”, “I think this person would lie to me if he or she would gain from it”, and “I think this person means well for me” (1 = *certainly not agree*, 7 = *certainly agree*; negative items reverse-coded). Scores were combined into a general measure of trust towards the perpetrator ( $M = 4.60$ ,  $SD = 1.23$ ,  $\alpha = .90$ ).

*Manipulation check.* Finally, to examine whether the compensation manipulation was successful, we asked participants: “To what extent has this person paid you more than the exact damage?” (1 = *not at all*, 7 = *very much*;  $M = 4.27$ ,  $SD = 2.76$ ).

## 4.2 Results

### 4.2.1 Manipulation check

An independent t-test revealed that participants in the overcompensation condition ( $M = 6.70$ ,  $SD = 1.20$ ) were more likely to indicate that the perpetrator paid them more than the exact

damage, compared to participants in the equal compensation condition ( $M = 1.93$ ,  $SD = 1.49$ ),  $t(53) = -13.05$ ,  $p < .001$ .

#### *4.2.2 Attributions of moral orientation*

The five attributions were examined separately using chi-square tests. Significantly more participants in the equal compensation condition than in the overcompensation condition believed these attributions to underlie the financial compensation (all  $ps < .01$ ; see Table 2).

*[Insert Table 2 about here]*

#### *4.2.3 Trusting intentions*

A significant difference in trusting intentions after equal compensation compared to overcompensation emerged,  $t(53) = 3.23$ ,  $p < .01$ . Specifically, after equal compensation ( $M = 5.08$ ,  $SD = 1.00$ ) participants trusting intentions were higher than after overcompensation ( $M = 4.10$ ,  $SD = 1.25$ ).

### **4.3 Discussion**

This scenario study provides further evidence that a person who offered an overcompensation is considered to be less morally oriented than a person who offered an equal compensation. Moreover, this study also suggests that, compared to equal compensation, overcompensation results in lower intentions to trust the perpetrator.

## **5. STUDY 4: LAB EXPERIMENT**

The results of the studies described so far were all obtained on the basis of participants' self-reports and scenario studies. In the present study we used a lab experiment to test whether these results also occur when the transgression and the compensation have real monetary consequences for the participants. Additionally, this study differs from the previous studies in two other important ways.

First, in the previous three studies we only investigated major overcompensation (i.e., compensation that covered ten times the amount of the damage); while in this study we investigated whether these negative effects of overcompensation also occur when the compensation is smaller. Therefore, two moderate forms of overcompensation (i.e., small overcompensation, which covered approximately two times the amount of the damage, and large overcompensation, which covered approximately six times the amount of the damage) as well as a control condition (i.e., no compensation) were included in this study.

Secondly, in literature a central distinction is made between affect- and cognition-based trust (see McAllister, 1995). Affect-based trust (which is also referred to as trust “from the heart”, see Chua, Ingram, & Morris, 2008, p. 437) mainly focuses on the intrinsic virtue of the relationship itself (Rempel, Holmes, & Zanna, 1985); while cognition-based trust (which is also referred to as trust “from the head”, see Chua et al., 2008, p. 437) reflects a strategic choice that focusses on the benefits that the relationship may yield (Lewicki & Bunker, 1996). We assume that the effectiveness of an overcompensation may vary depending on which aspects of trust it targets. Therefore, in the present study we included more calculus-based outcomes that tap into the cognitive aspect of trust (such as cooperation and relationship continuation); in addition to more relational-based outcomes which reflect affective trust (like perceptions and trusting intentions; see Lewis & Wiegert, 1985; McAllister, 1995).

## **5.1 Methods**

### *5.1.1 Participants and design*

A total of 68 undergraduate students of different faculties at Ghent University (nine men, 54 women, and five individuals who did not specify their gender,  $M_{age} = 21.70$ ,  $SD = 2.47$ ) participated in the study in exchange for payment. Unlike the previous studies, this study was a lab experiment in which we employed a 4-level (compensation: no compensation vs. equal compensation vs. small overcompensation vs. large overcompensation) between-subjects design.



### 5.1.2 Procedure

Upon arrival in the laboratory, each participant was placed in front of a computer. First, participants were told that, in order to perform a decision task, they would receive a starting budget of €20. Further, it was highlighted that at end of the experiment participants would be paid in accordance to their earnings during this task (whereby each euro represents 10 eurocents). The decision task was explained next. This task was a standard dictator game in which two players would decide over the division of a certain amount of money (Kahneman, Knetsch, & Thaler, 1986). To induce ownership over the money that was going to be divided during this task, both players had to cede €5 of their starting budget. During the task, the first player (the allocator) would then unilaterally divide this €10, while the second player (the recipient) could not influence this division, and thus had to accept the money offered by the allocator. All participants played the role of the recipient; the allocator was simulated. Before the start of the task, participants completed three comprehension checks (i.e., “Who will divide the money?”, “To what extent is the recipient able to influence the allocator’s decision?”, and “How much is the money in the game actually worth?”). All participants answered at least two checks correctly. Subsequently, all participants proceeded to the task in which the allocator was preprogrammed to allocate €2 to participant and to keep the remaining €8 for him- or herself. Taking into account that before the start of the task both players still had €15 left of their starting budget, the allocator’s decision yielded a €17 versus €23 distribution in favor of the allocator.

Next, to examine whether participants perceived this division as a transgression, we asked participants to indicate their satisfaction with the distribution by selecting one of two messages to send to the allocator (i.e., “I am satisfied with how you divided the €10” or “I am NOT satisfied with how you divided the €10”). Five participants (7.4%) indicated that they were satisfied with the initial division, and thus did not experience it as a transgression. For these participants the experiment ended at this point, whereas the remaining 63 participants (92.6%) proceeded to the compensation manipulation.

Participants in the *no compensation* condition received no additional money (“*I give you no extra money*”), which resulted in the recipient still ending up with €2 (or overall €17) and the allocator still ending up with €8 (or overall €23). In the *equal compensation* condition, participants received a compensation that precisely restored equality (“*I give you €3 extra*”). Thus, in this case both the allocator and the recipient eventually received €5 within the task itself and €20 in total. In the *small overcompensation* condition, participants received a compensation that resulted in the recipient ending up with a higher outcome than the allocator (“*I give you €7 extra*”). This additional compensation yielded a €9 versus €1 (or overall a €24 versus €16) distribution in favor of the participant. Finally, in the *large overcompensation* condition, participants received a compensation that resulted in the recipient ending up with a much higher outcome than the allocator (“*I give you €17 extra*”). Here, the allocator offered the €8 that he or she kept during the task as well as an additional €9 from his or her remaining starting budget, which eventually resulted in a €34 versus €6 distribution in favor of the participant.

Next, participants completed the different measures. Thereafter, the experiment was stopped, and the participants were paid. All participants received €10 for their participation, plus the money that they earned during the decision task (multiplied by 0.10). This amount depended on the specific condition they were in: In total, in the *no compensation* condition, participants received €11.7 (i.e.,  $€10 + [€17 \times 0.10]$ ), in the *equal compensation* condition €12 (i.e.,  $€10 + [€20 \times 0.10]$ ), in the *small overcompensation* condition €12.4 ( $€10 + [€24 \times 0.10]$ ), and in the *large overcompensation* condition €13.4 (i.e.,  $€10 + [€34 \times 0.10]$ ).

Finally, the participants were debriefed, thanked and dismissed.

### 5.1.3 Measures

*Satisfaction with the division.* To probe participants’ satisfaction with the final division, we used two items: “To what extent are you satisfied with the final division?” and “To what

extent are you happy with the final division?” (1 = *not at all*, 7 = *very much*;  $M = 4.74$ ,  $SD = 2.02$ ,  $\alpha = .97$ ).

*Fairness of the division.* To assess whether participants perceived the final division as fair, we also used two items: “To what extent do you think the final division is fair?” and “To what extent do you think the final division is just?” (1 = *not at all*, 7 = *very much*;  $M = 3.67$ ,  $SD = 2.03$ ,  $\alpha = .96$ ).

*Attributions of moral orientation.* We used the same five attributions as in Study 3 (i.e., “To what extent do you think the allocator offered you an additional €0 / €3 / €7 / €17: because this is righteous, because this is the most logical response, because he or she embraces the principle of reciprocity, out of moral obligation, and because this is what people are taught to do”). Here, these attributions were measured using a seven-point Likert scale (1 = *not at all*, 7 = *very much*;  $M = 3.75$ ,  $SD = 1.48$ ,  $\alpha = .86$ ) instead of a binary choice.

*Perceptions of the allocator.* As an indicator of participants’ perceptions of the allocator, we used the same seven impressions (i.e., honest, just, trustworthy, friendly, reliable, insincere, and unlikable) and response scales (1 = *not at all*, 7 = *very much*) as in Study 2 ( $M = 4.09$ ,  $SD = 1.31$ ,  $\alpha = .95$ ).

*Trusting intentions.* In order to grasp participants’ trusting intentions towards the allocator in a broader form, we used ten trust items. Here, we used the same six trust items as in Study 3, plus an additional four trust items (which are based on the trust subscale of Mayer and Davis, 1999). These four additional items were: “If I had my way, I wouldn’t let the allocator have any influence over issues that are important to me”, “I am willing to let the allocator have complete power over my outcomes in the next round of the task”, “I wish I had a good way to keep an eye on the allocator”, and “I would be comfortable giving the allocator a task or problem which is critical for me, even if I could not monitor his or her actions” (1 = *certainly not agree*, 7 =

*certainly agree*; negative items reverse-coded). The ten trust items were aggregated into a scale measure of participants' trusting intentions ( $M = 4.54$ ,  $SD = 0.96$ ,  $\alpha = .86$ ).

*Relationship preservation.* To assess participants' intentions to preserve the relationship with the allocator we used the six-item scale developed by Haesevoets et al. (2013). A sample item is: "I am inclined to give the allocator a second chance" (1 = *certainly not agree*, 7 = *certainly agree*; negative items reverse-coded;  $M = 4.39$ ,  $SD = 1.25$ ,  $\alpha = .91$ ).

*Cooperative intentions.* To probe participants' intentions to cooperate with the allocator again in the future we used six items (Van Hiel, De Cremer, & Stouten, 2008). A sample item is: "I would like to cooperate with the allocator on a future task" (1 = *certainly not agree*, 7 = *certainly agree*; negative items reverse-coded;  $M = 4.30$ ,  $SD = 1.50$ ,  $\alpha = .91$ ).

*Cooperative behavior.* Next, before the second round of the task would start, participants were asked: "Do you want to change your current opponent for another participant?" (binary choice: 0 = *yes*, 1 = *no*;  $M = 0.59$ ,  $SD = 0.50$ ). After answering this question, participants were informed that the time available for the experiment was expired.

*Manipulation check.* Finally, to examine whether the compensation manipulation was successful, we used two items: "To what extent has the allocator offered you a lot of extra money" and "To what extent has the allocator offered you little extra money" (1 = *not at all*, 7 = *very much*; second item reverse-coded;  $M = 4.56$ ,  $SD = 2.16$ ,  $\alpha = .94$ ).

## 5.2 Results

### 5.2.1 Manipulation check

An analysis of variance (ANOVA) revealed a significant main effect of compensation on the manipulation check,  $F(3, 59) = 113.64$ ,  $p < .001$ ,  $\eta^2 = .85$  (see Table 3 for the means and standard deviations for each compensation condition).

We explored this main effect further using five planned contrasts (see Table 4). These contrasts revealed significant differences in the expected direction in the no compensation condition compared to the different compensation conditions (contrast 1), in the equal compensation condition compared to the two overcompensation conditions (contrast 2), in the equal compensation condition compared to the small overcompensation condition (contrast 3), and in the equal compensation condition compared to the large overcompensation condition (contrast 4). However, the difference between the small overcompensation and the large overcompensation condition was non-significant (contrast 5).

### 5.2.2 Effectiveness of financial compensation

Eight one-way ANOVA's showed significant main effects of compensation on satisfaction with the division,  $F(3, 59) = 31.19, p < .001, \eta^2 = .61$ , fairness of the division,  $F(3, 59) = 127.91, p < .001, \eta^2 = .87$ , attributions of moral orientation,  $F(3, 59) = 27.17, p < .001, \eta^2 = .58$ , perceptions of the allocator,  $F(3, 59) = 16.54, p < .001, \eta^2 = .46$ , trusting intentions,  $F(3, 59) = 11.79, p < .001, \eta^2 = .38$ , relationship preservation,  $F(3, 59) = 9.85, p < .001, \eta^2 = .33$ , cooperative intentions,  $F(3, 59) = 10.56, p < .001, \eta^2 = .35$ , and cooperative behavior,  $F(3, 59) = 3.28, p < .05, \eta^2 = .14$  (see Table 3 for the means and standard deviations for each compensation condition).

Again, we explored these main effects further using five planned contrasts for each of these measures (see Table 4). The first contrast revealed that in the no compensation condition participants were less satisfied with the division, perceived it as less fair, attributed (the absence of) the compensation to occur as a result of a lower level of moral orientation on the part of the allocator, perceived him or her as less favorable, trusted him or her less, were less inclined to preserve the relationship with him or her and to cooperate with him or her in the future, and displayed less cooperative behavior than in the other compensation conditions. Regarding the second contrast, in the equal compensation condition participants were more satisfied with the

division and perceived it as fairer, attributed the compensation to occur as a consequence of a higher level of moral orientation on the part of the allocator, perceived him or her as more favorable, and trusted him or her more than in the small and large overcompensation condition; whereas no such difference occurred for relationship preservation, cooperative intentions, and cooperative behavior. More specifically, the third contrast revealed that the difference between equal compensation and small overcompensation was significant for satisfaction, fairness, attributions of moral orientation, and trust; however, the difference between these two conditions was only marginally significant for perceptions of the allocator, and non-significant for relationship preservation and cooperation. Furthermore, the results of the fourth contrast showed that the difference between equal compensation and large overcompensation was significant for satisfaction, fairness, attributions of moral orientation, perceptions of the allocator, and trust; and non-significant for relationship preservation and cooperation. Finally, the last contrast showed that small overcompensation is perceived fairer and attributed to occur due to a higher level of moral orientation on the part of the allocator than large overcompensation, whereas no such differences between these two overcompensation conditions were found for the remaining measures.

*[Insert Table 3 and 4 about here]*

### **5.3 Discussion**

This study provides further evidence that not only major, but also moderate overcompensation provokes negative outcomes (compared to equal compensation). That is, overcompensation is attributed to occur because of a lower level of moral orientation on the part of the perpetrator. Further, it results in less favorable perceptions of the perpetrator and lower levels of trust in the perpetrator. However, in addition to these results, overcompensation is just as effective as equal compensation to encourage relationship preservation and further cooperation.

Taken together, our results suggest that the effectiveness of overcompensation may depend on the aspect of trust on which it is focused. That is, overcompensation seems less effective than equal compensation when we focus on more relational-based outcomes (like trust and perceptions); whereas overcompensation appears to be just as effective – and thus not more effective, although the perpetrator makes great costs – as equal compensation for more calculus-based outcomes (such as cooperation and relationship preservation; see Lewis & Wiegert, 1985; also see McAllister, 1995).

## 6. GENERAL DISCUSSION

The occurrence of a financial damage (e.g., a damaged property or an unequal division of resources) violates victims' outcome-related concerns (Bolton & Ockenfels, 2000; Fehr & Schmidt, 1999), which can lead to a host of negative reactions (like distrust and non-cooperation, see Bottom et al., 2002; Desmet et al., 2011). Prior research has demonstrated that in such an economic context, perpetrators can satisfy victims' outcome-related concerns by providing a financial compensation (Lewicki et al., 2005; Ren & Gray, 2009). However, despite the fact that *overcompensation* occurs in many real-life situations, it has hardly been studied in relation to important variables like trust (restoration) and cooperation.

Because overcompensation is associated with considerable costs for the perpetrator (i.e., it constitutes a financial self-sacrifice), the critical question that we tried to answer in this research is whether such costly compensation has beneficial effects in addition to the impact of equal compensation. To explore this question, we conducted a questionnaire study, two scenario studies, and a lab experiment in which the perpetrator inflicted financial harm upon the victim in the first phase of each study, that he or she then tried to undo by offering the victim an equal compensation or an overcompensation.

### 6.1 Main conclusions

The results of our studies revealed that overcompensation does not provide any surplus value in addition to the impact of equal compensation regarding relationship preservation and cooperation, and that it even provokes negative outcomes in terms of perceptions and trust. This implies that trust and cooperation are not simply determined by the financial value of the compensation. Contrary to the popular belief in classic economic theory, immaterial aspects such as fairness and equality considerations also seem to contribute to the actual value that victims attach to the compensation. Hence, our findings support the notion held by many scholars that insights from psychology are useful, and even necessary, to understand people's behavior and decisions in economic contexts (for an overview, see Leiser & Azar, 2008).

In the remainder of the discussion, we further elaborate on three issues. First, we focus in more detail on the economic and psychological perspectives as point of views from which the effectiveness of overcompensation can be explained. Next, we pay attention to the different effects of overcompensation on trust and cooperation. Finally, we describe in depth some strengths and limitations of the present studies, and formulate some recommendations for further research.

## **6.2 Economic and psychological perspectives**

The results of our studies demonstrate that overcompensation is not more effective than equal compensation. This result does not corroborate an economic perspective, which states that in monetary terms overcompensation results in the best possible outcome for the victim, and thus should result in the most favorable situation. Our findings are more in favor of a psychological perspective, which postulates that behavior in interpersonal relationships is not only driven by concerns for the magnitude of the outcome per se, but also by the degree in which the compensation restores equality in outcomes.

From a first point of view, we argued that once a financial compensation is able to undo the victim's financial loss, a ceiling effect might occur, which implies that compensation beyond



the level of equal compensation should have no additional (positive or negative) effect. In line with this idea, the results of Study 4 revealed that overcompensation is just as effective as equal compensation to promote the preservation of the relationship between the perpetrator and the victim, to increase victims' intentions to cooperate with the perpetrator again in the future, and to entail actual cooperative behavior on the part of the victim. These results also corroborate the findings of a recently conducted meta-analysis in the field of consumer behavior, which demonstrated that overcompensation has no additional effect on post-complaint satisfaction, beyond the impact of simple compensation (Gelbrich & Roschk, 2011).

However, from a second point of view, we argued that if compensation is appreciated for the extent to which it redresses inequality, overcompensation should even be less effective than equal compensation, exactly because overcompensation fails to restore equality in outcomes. As a result of this inequality in favor of the victim, he or she may feel guilty or be suspicious about the motives of this perpetrator (see Estelami & De Maeyer, 2002). Indeed, our results indicate that overcompensation results in less satisfaction with the outcome and is perceived less fair than equal compensation (Study 4). Moreover, after a financial damage was inflicted and the perpetrator subsequently offered the victim an overcompensation, his or her behavior was attributed to a lower level of moral orientation than when this person offered an equal compensation (Study 2 through 4). Further, overcompensation also leads to less favorable perceptions of the perpetrator (Study 2 and 4) as well as lower levels of trust in this perpetrator (Study 3 and 4). However, here it is important to note that although overcompensation is not more effective than equal compensation, overcompensation is still more effective than no compensation. Thus, to enhance positive outcomes, it is still better that the perpetrator offers a compensation (equal or over) than no compensation at all. These results are consistent with the fairness literature which revealed that people prefer equity above both advantageous and disadvantageous inequity (i.e., inequality aversion, see Engelmann & Strobel, 2004; also see Bolton & Ockenfels, 2000; Fehr & Schmidt, 1999), and although both types of inequity results in

negative emotions (see Walster, Walster, & Traupmann, 1978; Schafer & Keith, 1980; Rook, 1987) advantageous inequity is typically preferred to disadvantageous inequity (Loewenstein et al., 1989). Moreover, the present findings also corroborate previous research in the domain of service marketing that showed that overgenerosity (i.e., outperforming consumers' expectations through too generous actions) may under certain conditions have negative effects on customers' evaluations (Estelami & De Maeyer, 2002).

To conclude, our results revealed that although overcompensation is associated with additional costs, it has no positive effects beyond equal compensation. However, an important question that arises from the current findings is the differential effects of overcompensation regarding relationship preservation and cooperation, on the one hand, and trust and perceptions, on the other hand.

### **6.3 Different effects of overcompensation on trust and cooperation**

We argue that these inconsistent results regarding the effectiveness of overcompensation are due to the fact that we focused on different aspects of trust (i.e., affect- versus cognition-based trust, McAllister, 1995).

More specifically, we reason that perceptions and trusting intentions (which reflect affective, relational-based outcomes informed by emotional responses to another person; Dietz & Den Hartog, 2006) are rooted in affect-based trust. Affect-based trust (also referred to as trust "from the heart", see Chua et al., 2008) is informed by emotional responses to the other party and thus reflects an implicit appraisal based on a gut feeling of another person's "dependable goodwill" (see Blois, 1999, p. 200). Here, the main focus is on the relationship itself. Conversely, we argue that relationship preservation and cooperation (which reflect cognitive, calculus-based outcomes informed by careful evaluations of potential costs and benefits; Dietz & Den Hartog, 2006) are grounded in cognition-based trust. Cognition-based trust (also referred to as "trust from the head", see Chua et al., 2008) is informed by the kind of careful evaluation of the

trustworthiness of another person, and thus reflects a strategic choice based on the prospect of making a profit (see Lewicki & Bunker, 1996; Lewis & Wiegert, 1985). Here, the main focus is not on the relationship itself, but on the benefits that the relationship may yield. Thus, when the victim has low confidence in the goodwill of the perpetrator (cf. low affective-based trust), the victim's perceptions of the perpetrator will be unfavorable and his or her trust in the perpetrator will be low. On the contrary, even when there is a certain level of suspicion on the part of the victim, cooperation will be high and the relationship will be preserved if the possible benefits of continuing the relationship outweigh the costs. However, while cooperation is possible in such situations, this cannot be considered as "true trust" because, according to Dietz and Den Hartog (2006, p. 563) "a deep a priori suspicion of the other remains".

Despite the fact that trust and cooperation entail different effects with regard to overcompensation, up till now the precise relationship between trust and cooperation – i.e., whether trust leads to cooperation or cooperation leads to trust – remains elusive, leading theorists to disagree on the causal direction (for an overview, see Hardin, 2002; Macy, 2002; also see Yamagishi, Kanazawa, Mashima, & Terai, 2005). Moreover, although numerous scholars have argued that trust is a necessary ingredient for cooperation (e.g., Cook, 2001; De Cremer & Tyler, 2005), some authors have demonstrated that trust is not a required condition for cooperation to occur (e.g., Axelrod, 1984; Mayer, Davis, & Schoorman, 1995). More specifically, cooperation can result for a variety of reasons unrelated to trust, such as coercion (e.g., a court-ordered compliance) or out of financial considerations (e.g., the possibility of making a profit; see Mayer et al., 1995). In line with this idea, our results seem to suggest that cooperation can also occur even without "true interpersonal trust" (i.e., a deeper form of trust which results from a process of mutual risk-taking over time; see Cook, Yamagishi, Cheshire, Cooper, Matsuda, & Mashima, 2005; also see Dietz & Den Hartog, 2006). This implies that, after receiving overcompensation, victims may still distrust the perpetrator but in first instance they are willing to continue their relationship with the perpetrator and to cooperate with the perpetrator again. The

reason for this cooperation may, however, be due to self-interest and the prospect of receiving specific benefits from this relationship. Nonetheless, the main message behind these results is that, while overcompensation may rebuild cooperation (albeit not more effectively than equal compensation) it does so not only at monetary, but also at relational costs that limit its effectiveness as a tool to promote true interpersonal trust.

#### **6.4 Limitations and strengths**

Before closing, some limitations, strengths, and recommendations for further research must be discussed. First, we only used undergraduate students from a Belgian university as participants in our studies (although we recruited students from different majors). This implies that our sample is not representative of the general population. Consequently, when in a specific situation financial needs are high (e.g., when a person is bankrupt) or in other cultures (e.g., the legal claim culture in the United States) potentially different effects of overcompensation can be expected. More specifically, in such situations and cultures where there is a larger focus on economic considerations, overcompensation may have better effects than presently obtained. In accordance with this idea, research on trust in the domain of inter-organizational relationships found that automobile dealers in Dutch firms respond negatively to both advantageous and disadvantageous inequity, whereas in the United States they only respond negatively to disadvantageous inequity (Scheer, Kumar, & Steenkamp, 2003). Further research should compare the effectiveness of overcompensation across different cultures.

Secondly, an important strength of our research is that we started with an open mindset (i.e., in Study 1 participants were completely free to give their own interpretation of the situation, and in Study 2 through 4 we built further upon these attributions), used different approaches of data collection (i.e., Study 1 was a questionnaire study, Studies 2 and 3 were scenario studies, and Study 4 was a lab experiment), different transgression types (i.e., a damaged property in Study 1 through 3, and an unequal division of resources in Study 4), and included different measures (i.e.,

attributions in Study 1 through 4, perceptions in Study 2 and 4, trust in Study 3 and 4, and satisfaction, fairness, relationship preservation, and cooperation in Study 4). This divergence in the methods used enlarges our confidence in the robustness of our findings.

Finally, in our first three studies we employed a major overcompensation. Here, our main aim was to use a stringent test of the economic versus psychological perspective. However, our results indicate that even in such an extremely beneficial situation in economic terms, people's perception of the perpetrator were less favorable and their trust in the perpetrator was lower compared to a situation in which the perpetrator provided an equal compensation. Nonetheless, a vital strength of our research is that we were able to replicate these negative effects of overcompensation using two moderate forms of overcompensation; and this in a lab experiment in which the transgression and the subsequent compensation had real monetary consequences for the participants.

## 6.5 Conclusion

The present studies investigated the effectiveness of overcompensation, relative to equal compensation. Our results revealed that despite the considerable costs of overcompensation, it even has negative effects on affective, relational-based outcomes, like perceptions and trust. Furthermore, although overcompensation does not have these negative effects on cognitive, calculus-based outcomes, such as relationship preservation and cooperation, it does not yield better outcomes than equal compensation. In conclusion, if a perpetrator has inflicted a financial damage to a person, overcompensation is not a cost-effective means to redress the damage.

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*Table 1.* Principal component analysis (pattern matrix) of the 15 attributions ( $N = 90$ ), for Study 2.

Attribution	Factor loading			
	PC1	PC2	PC3	PC4
To what extent do you think this person paid €50 / €500:				
1) To enlighten his or her consciences	<b>.92</b>	.02	-.16	.01
2) Out of guilt	<b>.88</b>	.08	.07	-.13
3) To feel better about him- or herself	<b>.86</b>	-.11	-.01	.01
4) Because he or she is financially capable to do so	<b>.53</b>	-.15	.16	.11
5) Because this is righteous	-.02	<b>-.90</b>	-.13	.11
6) Because this is the most logical response	-.09	<b>-.89</b>	-.04	.08
7) Because he or she embraces the principle of reciprocity	.01	<b>-.71</b>	.29	-.18
8) Out of moral obligation	.13	<b>-.69</b>	.12	-.21
9) Because this is what people are taught to do	.20	<b>-.66</b>	-.11	.27
10) Because he or she is affected or surprised	-.09	-.20	<b>.72</b>	.02
11) To compensate for possible additional costs	.13	.11	<b>.71</b>	-.23
12) Because he or she cannot accurately estimate the damage	.01	.12	<b>.70</b>	.12
13) Out of fear	.00	-.22	<b>.55</b>	.20
14) To quickly get out of the situation	-.08	-.07	.03	<b>.89</b>
15) To silence the victim	.30	.20	.42	<b>.52</b>

*Note.* **Bold** factor loading reflects loading on the relevant component.

*Table 2.* Results of the chi-square tests for attributions of moral orientation ( $N = 55$ ), for Study 3.

Attribution	Equal compensation ( $n = 28$ )		Overcompensation ( $n = 27$ )		$\chi^2$
	No (%)	Yes (%)	No (%)	Yes (%)	
I think that this person paid me €10 / €100:					
Because this is righteous	4 (14.3)	24 (85.7)	25 (92.6)	2 (7.4)	33.82***
Because this is the most logical response	6 (21.4)	22 (78.6)	26 (96.3)	1 (3.7)	31.67***
Because he or she embraces the principle of reciprocity	14 (50.0)	14 (50.0)	24 (88.9)	3 (11.1)	9.73**
Out of moral obligation	3 (10.7)	25 (89.3)	18 (66.7)	9 (33.3)	18.23***
Because this is what people are taught to do	6 (21.4)	22 (78.6)	20 (74.1)	7 (25.9)	15.28***

*Note.*  $df = 1$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

*Table 3.* Means and standard deviations for each compensation condition ( $N = 63$ ), for Study 4.

Measure	Condition							
	No compensation		Equal compensation		Small overcompensation		Large overcompensation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Manipulation check	1.31	0.77	4.76	1.02	6.06	0.93	6.29	0.58
Satisfaction with division	2.25	1.08	6.47	0.80	5.00	1.29	5.18	1.85
Fairness of division	1.97	0.87	6.68	0.43	3.16	0.85	2.57	0.83
Attributions of moral orientation	2.45	0.96	5.38	0.59	3.93	0.92	3.06	1.39
Perceptions of allocator	2.70	1.04	5.05	0.98	4.46	0.82	4.11	1.12
Trusting intentions	2.41	0.82	4.22	0.82	3.60	0.63	3.49	1.21
Relationship preservation	3.17	1.40	4.89	1.10	4.80	0.68	4.71	0.84
Cooperative intentions	2.84	1.55	5.16	1.33	4.56	0.95	4.63	1.00
Cooperative behavior	0.31	0.48	0.82	0.39	0.62	0.50	0.57	0.51



Table 4. Contrasts tested ( $N = 63$ ), for Study 4.

Measure	Contrast									
	Contrast 1		Contrast 2		Contrast 3		Contrast 4		Contrast 5	
	<i>CE</i>	<i>SE</i>	<i>CE</i>	<i>SE</i>	<i>CE</i>	<i>SE</i>	<i>CE</i>	<i>SE</i>	<i>CE</i>	<i>SE</i>
Manipulation check	-4.39***	0.25	-1.41***	0.26	-1.30***	0.30	-1.52***	0.31	-0.22	0.31
Satisfaction with division	-3.30***	0.37	1.38**	0.39	1.47**	0.45	1.29**	0.46	-0.18	0.47
Fairness of division	-2.17***	0.22	3.81***	0.23	3.52***	0.26	4.11***	0.27	0.59*	0.28
Attributions of moral orientation	-1.67***	0.29	1.89***	0.30	1.45***	0.34	2.32***	0.36	0.87*	0.36
Perceptions of allocator	-1.84***	0.29	0.77*	0.30	0.60 <sup>†</sup>	0.35	0.94*	0.36	0.34	0.36
Trusting intentions	-1.36***	0.26	0.68*	0.27	0.62*	0.31	0.73*	0.32	0.11	0.32
Relationship preservation	-1.63***	0.30	0.13	0.32	0.09	0.36	0.18	0.38	0.09	0.38
Cooperative intentions	-1.94***	0.36	0.56	0.38	0.59	0.43	0.53	0.45	-0.07	0.45
Cooperative behavior	-0.36*	0.14	0.23	0.14	0.20	0.16	0.25	0.17	0.05	0.17

*Note.* <sup>†</sup>  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; *CE* = Contrast Estimate; *SE* = Standard Error; Contrast 1 = no compensation vs. equal compensation + small overcompensation + large overcompensation; Contrast 2 = equal compensation vs. small overcompensation + large overcompensation; Contrast 3 = equal compensation vs. small overcompensation; Contrast 4 = equal compensation vs. large overcompensation; Contrast 5 = small overcompensation vs. large overcompensation.